

#### ABSTRACT

The invention is a method for controlling an electrolytic process and plant, utilizing history data collected in the process as well as mathematical and heuristic models created on the basis of empirical knowledge, and by means of said models, there are defined indexes based on real-time process measurement parameters. The method makes use of real-time cell voltage measurements. On the basis of the obtained real-time indexes, there is achieved a correctly focused process control action at the correct point of time.